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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/538,024	03/29/2000	Subhankar Chatterjee	C-481B	6245

7590

04/09/2003

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EXAMINER

JACKSON, MONIQUE R

ART UNIT

PAPER NUMBER

1773

DATE MAILED: 04/09/2003

25

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/538,024

Applicant(s)

CHATTERJEE ET AL.

Examiner

Monique R Jackson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10,13-35,38-50 and 53-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10,13-35 and 38-49 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 54 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 12-13.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The amendment filed 12/26/02 has been entered. Claims 11, 12, 36, 37, 51 and 52 have been canceled. New claims 53-55 have been added. Claims 1-10, 13-35, 38-50 and 53-55 are pending in the application.
2. It is noted that the first amendment to the specification, with regards to paragraph 2, lines 20-31 and continuing on page 3, lines 1-7, was not made because it does not correspond to the recited section in the specification.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claim 4 is objected to because of the following informalities: Claim 4 recites a Markush group utilizing the term "selected from the group consisting of" however it also includes the alternative expression "or" in the Markush group. Considering the use of the word "or" is not proper when reciting a Markush group, appropriate correction is required.
5. Claim 54 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

6. Claims 53 and 55 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 0 799 871 A1 (EP'871.) EP'871 teaches a water-based UV curable ink for plastic substrates comprising a water-dispersible or water-soluble acrylate oligomer such as a water-soluble urethane acrylate oligomer; a monomer that is capable of softening the substrate, preferably hexanediol diacrylate; and a passive resin that is soluble in the monomer, most preferably an

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acrylate or methacrylate copolymer; wherein the ink comprises preferably at least 25% water based on the total weight of the ink and may further include usual additives such as pigments and photoinitiators (Abstract; Page 2, line 14-Page 3, line 1.) EP'871 further teach that the ink composition is applied to a substrate, such as a PVC or polystyrene substrate, and then cured with one pass through a UV drier (Examples.) EP'871 teach that the amount of water content in the ink affects the adhesion and hardness of the cured films and that a level of approximately 25% was found to give excellent adhesion and film weight though higher level can be used but problems with water retention in the film occur and hence a pre-dry stage may be required before UV curing (Page 4, lines 45-55.)

7. Claim 50 is rejected under 35 U.S.C. 102(b) as being anticipated by FR 2739838 (FR '838.) FR '838 teaches a UV curable composition useful as a barrier agent in food packaging wherein the composition comprises at least one fluorinated polymer, a methacrylate, and acrylic resins in aqueous solution wherein water is present in an amount of 10-15wt% (Abstract.)

Allowable Subject Matter

8. Claims 1-10, 13-35, and 38-49 are allowed. The following is an examiner's statement of reasons for allowance: the closest prior art does not teach or render obvious an actinic radiation curable, aqueous, homogeneous composition comprising a water-soluble compound which contains at least one alpha, beta-ethylenically unsaturated, radiation polymerizable group or a water-soluble oligomer containing two or more acrylic groupgs such that when the composition is cured, less than 50ppb of uncured residue or oligomer is extractable therefrom when immersed and heated in 10ml of simulant liquid per square inch of cured film. The closest prior art, Buethe et al, teach a radiation curable aqueous composition comprising water and a radiation curable

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compound containing at least one alpha, beta ethylenically unsaturated radiation polymerizable group or acrylic group which may be irradiated with actinic radiation to form a cured coated substrate which could be utilized for coating foodstuff containers. However, Buethe et al teach that the composition is a dispersion and do not teach or suggest that the composition is a homogeneous composition or solution as instantly claimed. Buethe et al also do not teach that the cured coating would have an uncured residue or oligomer extractable when immersed and heated in 10ml of simulant liquid per square inch of cured film of less than 50ppb.

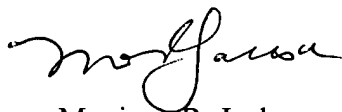
Response to Arguments

9. Applicant's arguments with respect to claim 50 has been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique R Jackson whose telephone number is 703-308-0428. The examiner can normally be reached on Mondays-Thursdays, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul J Thibodeau can be reached on 703-308-2367. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Monique R. Jackson
Primary Examiner
Technology Center 1700
April 7, 2003